



Adam Meyer
Key Points – Direct Testimony,
Rebuttal

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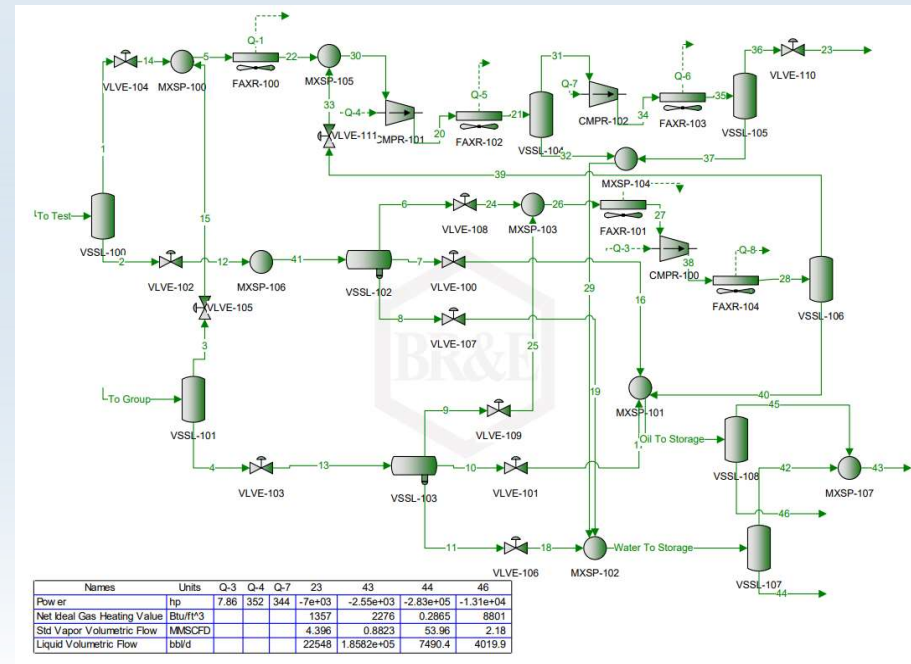


Control Devices

Valor Rebuttal, Control Devices

Design Process

- Process simulation → Flow range, pressure/temp range, estimated composition
- Design for normal operations (foreseeable processes), turndown
- Provide specification to flare, combustor, VRU manufacturer
- Design = intent to capture all vapors and combust all vapors efficiently to 98% based on simulated composition



Valor Rebuttal, Control Devices

During Operations

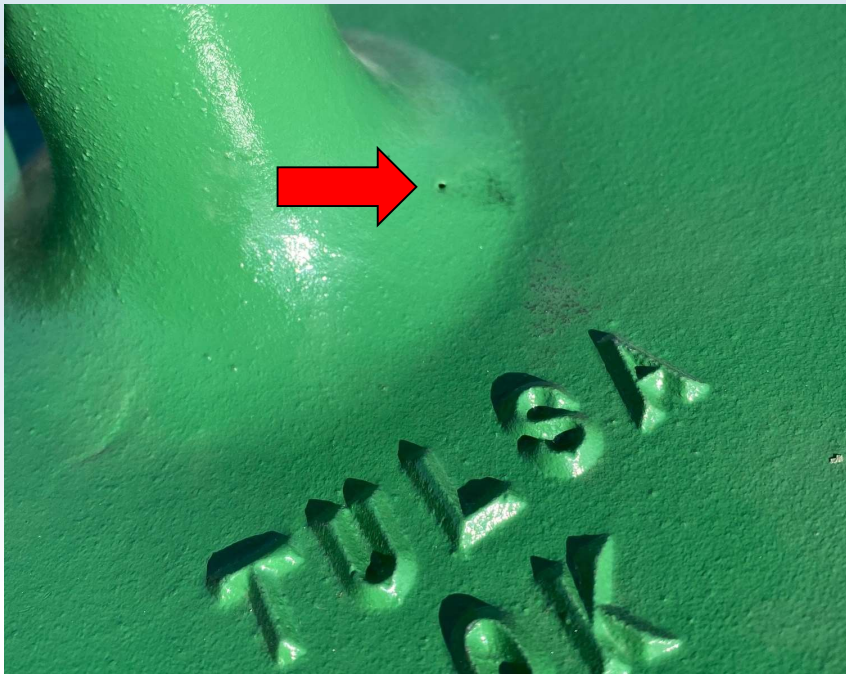
- Potential unanticipated flows, pressures, temperatures, ambient swings
- Potential for fluctuating compositions
- Temporary Flares and equipment used for emission control during upsets, failures, etc are even more difficult
 - Need to quickly gather gas sample
 - Need to quickly perform CVS analysis
 - Need to quickly confirm combustion efficiency
 - Temporary flares and equipment used for emission control therefore should not require rigorous analysis compared to permanent installations. There is no time. It is best to use best engineering or operational practices.

Therefore

- Rules should carve out design requirements separate from operational/maintenance requirements and should have a carve out for temporary emission control equipment.

Valor Rebuttal, CVS No Emissions vs Minimal

Purpose of these examples is to illustrate that some things are out of operator control



Valor Rebuttal, 100% capture

Truck line connection/disconnection makes 100% capture technically infeasible.



Valor Rebuttal, Closed Vent System Analysis

Two methods for CVS Analysis in CDs

- Theoretical Simulation/Modeling (referred to as “Open Loop”)
- Closed Loop Vapor Control System
 - Series of feedback loops from tank battery to control upstream equipment/wells to manage liquids and vapors into the tank system
- Other methods in development are more promising as technology and our understanding grows on this topic.

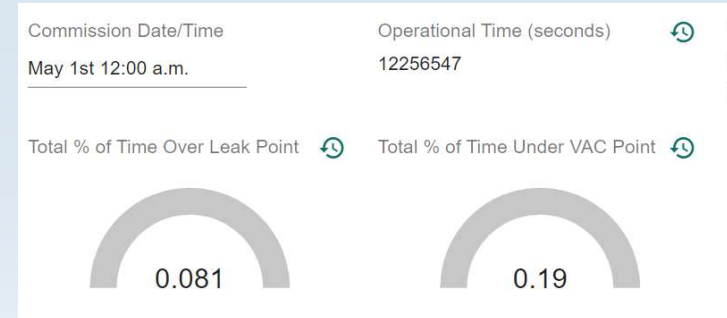
NMED rules should allow for exploration into other methods for proof of compliance, and therefore should not explicitly write rules to the theoretical simulation/modeling approach.

Valor Rebuttal, Closed Vent System Analysis

Closed Loop Vapor Control System Example



Advanced Tank Pressure Monitoring



Valor Rebuttal, Closed Vent System Analysis

Capacity Testing

